

LONG ISLAND BOTANICAL SOCIETY NEWSLETTER

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The Summit Vegetation of Long Island: After A. Blizzard

Ray Welch

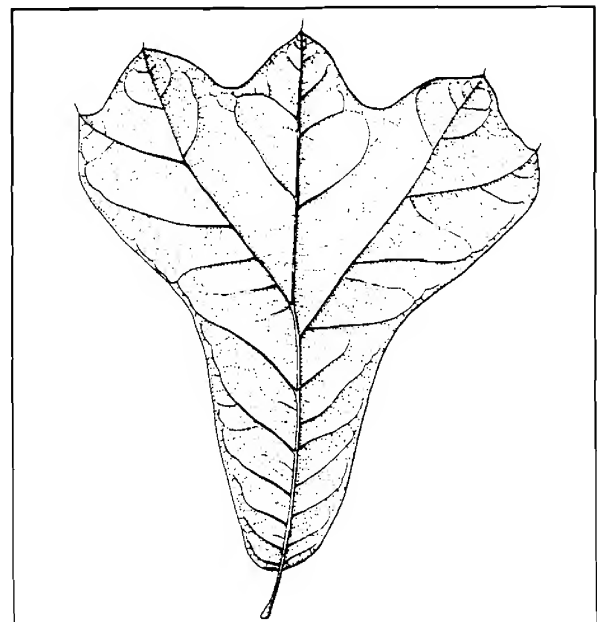
August 3, 1881, brought Walt Whitman back to his childhood home at West Hills, Long Island and he said, in a letter to the *New York Tribune*, "I write this back again at West Hills on a high elevation (the highest spot on Long Island?) of Jayne's Hill. . . . A view of thirty or forty, or even fifty or more miles, especially to the east and south and southwest; the Atlantic Ocean to the latter points in the distance—a glimpse or so of Long Island Sound to the north" (Gatewood, 1976). Silas Wood, early in the 19th century, was said to be able to see both the Atlantic and the Sound from a point in the West Hills called "Oakley's High Hill Field." He later paid for a survey to discover if the spot was, indeed, the Island's highest point, and found it so, at 354.5 feet above sea level (Wood, 1865).

The official height of High Hill, several times resurveyed, and now generally called Jayne's Hill, has risen from 354.5 feet to 428 feet, and fallen back to its currently accepted elevation of 400.9 feet. Unfortunately for fame, Todt Hill on Staten Island is a few feet higher, and so it has the distinction of being "the highest point on the Atlantic seaboard south of Maine." Jayne's Hill slumbers in the relative obscurity of the Number Two spot.

The summit of Long Island is preserved in West Hills County Park, its site rather overlooked and neglected.

There are no signs to lead you to it, and there is only a small sign at the end of the closest road access to tell you anything about it (less than I've told you already). You have to want to go there. I did, and so I trekked there in October and November of 1998. Run-down park buildings, shamefully left to crumble by the county, greet you as you begin your final summit assault from your parked car (less than five minutes walking, even the long way; less than 50 feet of ascent; thin air no problem). At the summit is a large boulder brought in to hold a commemorative plaque, a plaque soon vandalized and stolen and never replaced, leaving only a great blank hollow in the stone. There is a bench to sit on. I sat.

There is no view to the Sound to the north and west (trees loom close), nor can you see "fifty or more miles, especially to the east" (more trees and an immense and ugly water tower block the view). Only to the south,



Black-jack Oak (*Quercus marilandica*)
Occurs on the western slope of Jayne's Hill, the 2nd
highest point on the Atlantic seaboard south of Maine.
Illustration from *Flora of North America*, Vol. 3 (1997);
Oxford University Press.

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where a sight line is cut through the encroaching forest, is there a grand view: the Atlantic glitters on the horizon (and the Babylon Town landfill squats in the middle distance). The Jayne's Hill of Wood and Whitman is not the hill we have today. Where have the views gone?

Wood's and Whitman's observations and the name "High Hill Field" tell us that up to at least 120 years ago Jayne's Hill must have been quite grassy and open...there is no way to get extensive views otherwise. And this is no surprise. Long Island in the 19th century was much less wooded than now. The land was cleared for timber, for firewood, for cultivation, or for grazing, and kept that way by brush cutting and regular burning, and so Jayne's Hill was probably a pasture after its clearing. Though the grassland is gone, we have a kind of snapshot to tell us much about its disappearance. A man with the wonderful name of Alpheus Blizzard took the "picture" in the late 1920s (Blizzard, 1931). Blizzard worked out of Cold Spring Harbor and was affiliated with Coker College in South Carolina, but I have little further information about him. He was interested in patterns of vegetational change as seen at Jayne's Hill, and carried out plant surveys and set up quadrats to investigate the question I've posed: where did the views go? Unfortunately, his location maps and quadrats are not easily correlated, but I provide a modified and annotated figure from his paper, my Figure 1.

Figure 1 shows Blizzard's general community map, where the shrub and grassland areas seem to clearly outline an old field surrounded by woodlands. This area might well represent the grassland that allowed extensive views to the east and south as well as glimpses to the north, with the west blocked (Whitman doesn't mention views to the west). Unfortunately, even in Blizzard's original Figure, much detail is almost too minute to decipher, but enough can be seen to tell us where the grassland went. It succeeded away. Where today we have woodland, in 1928 (the actual year of survey), we see a shrinking grassland being invaded by Bayberry, Wild Black Cherry, various oaks, and Red Cedar. No surprise to anyone who looks at old fields on Long Island today, and no surprise that the Jayne's Hill grassland is gone.

But what was the extinct grassland like when it topped the hill? Some of Blizzard's quadrats let us know. He found that the grassland was about 50% Little Bluestem (*Schizachyrium scoparium*), and my inspection of some photographs in the original paper confirms this. In the spaces between the grass tussocks was little, except fruticose lichens (*Cladonia* and *Cladonia* spp.) and Haircap Moss (*Polytrichum* sp.). There was little else in any amount, save occasional *Hypericum gentianoides*. All of these, of course, indicate dry, open, unfertile habitat with abundant sunlight. Today? Gone, all gone. The woods won, as they will almost anywhere on Long Island.

The major part of Blizzard's grassland is now fenced in and holds a water tower and associated structures as well as roughly maintained lawn, brush, and some trees that might represent some of those that were invading the field in 1928. A portion of the old grassland, however, lies to the north of the fenced area and is more "natural." Here you can see Black Oak, White Oak, Black Birch, Red Maple, Wild Black Cherry, some Pignut Hickory, a few Gray Birches, and a lone Pitch Pine. There is a light undergrowth of Poison Ivy and a tangle of *Smilax*. The ground is covered thickly with leaf litter and there is not a fruticose lichen to be found.

The woods around the old field contain some additional species in addition to many of the above ones. There are Chestnut Oak, Blackjack Oak, Black Locust, American Dogwood, American Beech, American Chestnut sprouts (not many), and a few White Pines. Shrubs include various *Vaccinium* species and Black Huckleberry, as well as Maple-leaf Viburnum and Mountain Laurel.

The abundant, successional Bayberry of Blizzard is reduced to a few unthrifty clumps along the edges of the trails near the summit. There is a scattering of mature, unhappy Red Cedars that are struggling for light against overtopping oaks here and there in the old grassland, inside and outside the fenced area, and there are some big Wild Black Cherries. So, although the grassland is gone, some of the pioneers persist to remind us of the successional processes, perhaps now approaching a final state. Yet, surprisingly, Jayne's Hill still supports a grassland. This grassland is a few square meters just beyond the west edge of Figure 1, beyond where the trail turns

(continued on page 4)

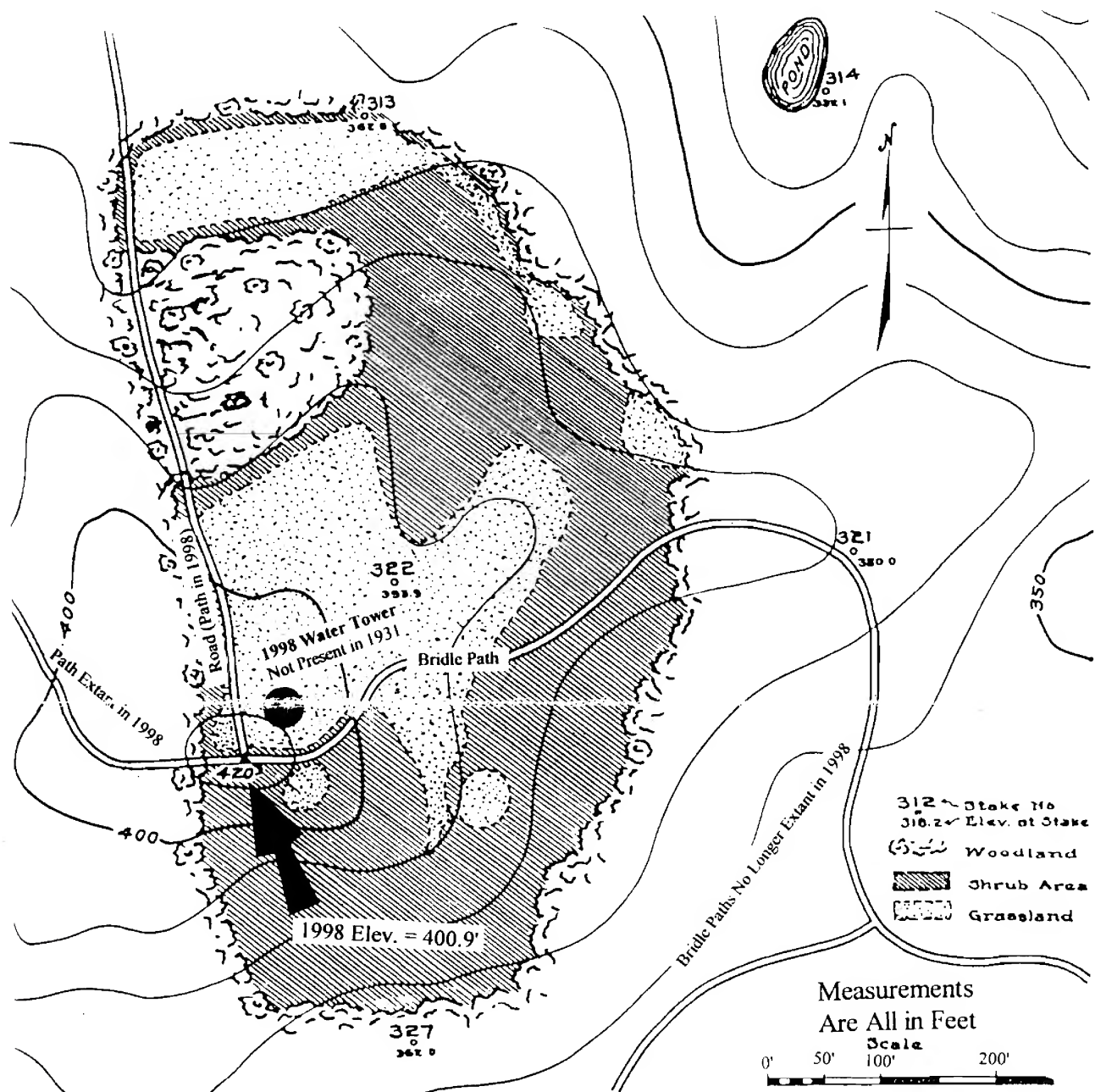


Figure 1. General Community Map of Summit of High (Jayne's) Hill in 1931
Showing Woodland, Shrub and Grassland Areas.
Modified by the author from Blizzard (1931).

northwest. Here, among young Black Birches and some small oaks (the larger oaks that were once there are dead and bleached—probably Gypsy-mothed in the 1970s), are a few scattered clumps of Little Bluestem among much more thriving Pennsylvania Sedge. This paltry grassland renaissance is probably the relatively recent result of the loss of the oak canopy, and it is already waning as trees return. These few clumps of Little Bluestem are the last echo of the community that once covered the hill and let Whitman see from the Sound to the Atlantic.

A comparison of the plants on Blizzard's partial list (137 species) of woody and non-woody species seen at Jayne's Hill with those observed today shows few surprises. Overall, the species (at least the woody ones) of then are species there today. What are noticeably different are additions to the flora. Among species seen today, but not listed in 1931, are Pokeweed, Garlic Mustard, Mugwort, Japanese Knotweed, Wineberry, Multiflora Rose, Red Mulberry, Oriental Bittersweet (a lot!), and, around the summit bench, lawn weeds like Dandelion, Speedwell, Dock, Sorrel, and Hawkweed. Japanese Honeysuckle was there in 1931, but few other aliens. Today's increased weediness is a clear sign of the world's increasingly homogenized and corrupted floras.

As I sat on the bench behind the summit boulder, I looked around and asked myself a last question, "What's the highest plant on Long Island?" Well that depends on what's meant by "highest." The tree rooted on the highest spot? That's a tossup between a Wild Black Cherry and a Scarlet Oak, with some White Oak sprouts vying for status. The highest shrub? A Mountain Laurel. The highest forb? Well, as far as a native plant, perhaps *Solidago rugosa*. Or, on the other hand, what tree is it that rises highest from the ground? That appears to be a White Oak, one of those indicated in Figure 2 as "possibly still extant." Then does a sturdy White Oak take the prize for being the Island's most lofty plant? No, alas. Clambering up the oak and flaunting a few leaves even higher than the topmost twig of the tree is—can we hear it for the winner?—Oriental Bittersweet!

References

- Blizzard, Alpheus W. 1931. Plant sociology and vegetational change on High Hill, Long Island, New York." *Ecology* 12: 208-231.
- Gatewood, Dallas. 1976. A view from Jayne's Hill. *Newsday*. December 27, p. 4A
- Wood, Silas. 1865. A Sketch of the First Settlement of Several Towns on Long Island, With a Biographical Memoir and Additions by Alden J. Spooner. p. xvii. Brooklyn: Printed for the Furman Club.

Grandifolia Sandhills: Update

More than a dozen environmental groups, including the Long Island Botanical Society, have been closely monitoring the proposed plan to destroy and develop the Grandifolia Sandhills of Baiting Hollow, in the Township of Riverhead. LIBS representatives have been present at all public hearings and meetings; we have been active in the environmental review process at the state and local level.

On 15 December 1998, the Riverhead Town Board accepted (not approved) the 1000+ page Draft Environmental Impact Statement (DEIS) prepared by Ron Abrams of Dru Associates of Glen Cove. As predicted, it is thoroughly flawed and asserts that **no environmental harm will result from the proposed 36-hole golf course and 500-room hotel resort complex.**

The DEIS claims that the Sandhills are of simple glacial deposits and were not formed by sand blowing back from the beach. It goes on to claim that the Sandhills are the same hills you see from Port Jefferson to Orient and all the way to Rhode Island. These statements are contrary to all previously published scientific conclusions.

The developer's consultants claim that all of the globally rare maritime dwarf beech forest is contained within the limits of the state's coastal erosion hazard boundary; however, environmentalists argue that a significant portion of this rare community lies landward of the boundary and will be destroyed by the project.

The DEIS also argues that the New York Natural Heritage Program is wrong in their classification of the coastal oak-beech forest as being rare in New York. According to Ron Abrams, "There is nothing special about those woodlands."

The consultants found no nesting hummingbirds on site nor any rare plants. In other areas of study, the DEIS says the project will have no adverse impacts on groundwater supplies nor upon the Long Island Sound. Remarkably, the mega-golf resort will have no negative traffic impacts upon the scenic and historic Sound Avenue corridor, often referred to as the gateway to the North Fork.

The Riverhead Town Board has scheduled a public hearing on this application on 5 January 1999 at 7:20pm.

For more information please call 516/369-3300.

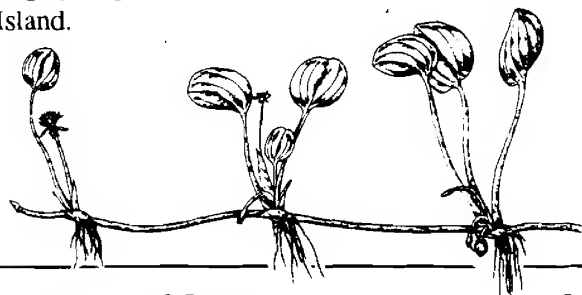


Society News

September Meeting. It felt like a family reunion during Otto Heck's talk on the ferns of the northeast. The lecture hall at Upland's Farm was packed with Otto's former students; for 30 summers Otto taught and conducted the workshop "Natural History and Ecology of Long Island," sponsored by the Long Island Chapter of The Nature Conservancy. Otto's interest in ferns began while making terrariums to house small native amphibia while attending Bayside High School in Queens. The evening lecture covered the identification and ecology of ferns and fern hybrids, with detailed information on locations of rare species.

October Meeting. Joann Knapp shared her spectacular, award winning photographs of the high alpine tundra plants that grow above tree line in the mountains of the western United States. Joann was a member of the staff of Planting Fields Arboretum for 25 years and it's no wonder that she served as staff photographer; her scenery shots of the rugged terrain and close-ups of rare endemic species transported viewers to a land of glacial cirques, "hanging" meadows and tarns, with meltwater streams polding down to a desert 8,000 feet below.

November Meeting. The geology textbooks need to be rewritten, and Gil Hanson explained why during his talk on how the glaciers really formed Long Island. Most of us have learned that the Ronkonkoma Moraine is a terminal moraine (composed of till) that comprises the geologic backbone of Long Island, and the Harbor Hill Moraine is a recessional moraine (composed of till) located on the island's north shore. But the facts, recorded in underlying sediments, clearly do not support this classic interpretation of Long Island's geology. Dr. Hanson clearly and methodically explained how the forces of glacial tectonics and push moraines were largely responsible for the early formation of Long Island.



December Meeting. Richard Murcott of the American Rhododendron Society presented an interesting program on Rhododendrons and their hybrids. It was especially noteworthy to learn of the numerous similar species occurring in eastern North America and eastern Asia. In 1859, Asa Gray found that some 40 genera of vascular plants were limited entirely to these two widely separate areas, and that, of 580 species in Japan, all had counterparts in the northeastern United States.

Editor's e-mail address

Eric Lamont has a new e-mail address:
elamont@hamptons.com

Articles for the Newsletter and other LIBS info may be sent electronically or on a diskette formatted for Microsoft Word.

New Members

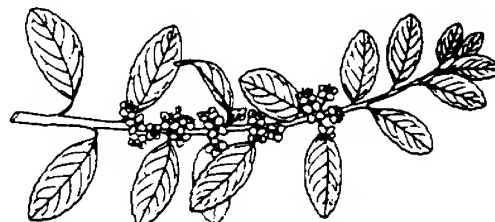
The Long Island Botanical Society is pleased to welcome the following new members:

Jeanette Dumas, Philadelphia, PA; Joseph & Theresa Hauger, Baiting Hollow; Gunda Meyer, Huntington; Robert Schmitz & Marsha Barros, Levittown; Timothy Sullivan, East Hampton; and Kathleen Wohlgemuth, Hicksville.

IN MEMORIAM

Thomas J. Delendick

Stephen K-M. Tim



LONG ISLAND BOTANICAL SOCIETY

Founded: 1986; Incorporated: 1989.

The Long Island Botanical Society is dedicated to the promotion of field botany and a greater understanding of the plants that grow wild on Long Island, New York.

President	Eric Lamont
Vice President	Skip Blanchard
Treasurer	Carol Johnston
Rec'd Sec'y	Barbara Conolly
Cor'sp Sec'y	John Potente
Local Flora	Steven Clemants
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	Tom Meoli
Program	John Potente
Membership	Lois Lindberg
Conservation	John Turner
	Karen Blumer
Education	Mary Laura Lamont
	Thomas Allen Stock
Hospitality	Betty Lotowycz
	Jane Blanchard
Editor	Eric Lamont

Membership

Membership is open to all, and we welcome new members. Annual dues are \$10. For membership, make your check payable to LONG ISLAND BOTANICAL SOCIETY and mail to: Lois Lindberg, Membership Chairperson, 45 Sandy Hill Road, Oyster Bay, NY 11771-3111

PROGRAMS

12 January 1999 - 7:30 pm*

Member's Night, Bill Patterson Nature Center, Muttontown Preserve, East Norwich; show some of your favorite botany-related slides. Call **Steve Clemants** at 718/941-4044 ext. 234 if you plan to bring slides.

9 February 1999 - 7:30 pm*

John Turner

(LIBS Conservation Chairman)

**"History of the Cranberry Industry
on Long Island, NY"**

Location: Bill Patterson Nature Center,
Muttontown Preserve, East Norwich.

*Refreshments & informal talk begin at 7:30pm. the meeting starts at 8pm. For directions to Muttontown Preserve call 516-571-8500.

LONG ISLAND BOTANICAL SOCIETY

c/o Muttontown Preserve

Muttontown Lane

East Norwich, New York 11732